

Work Order ID 65720

Monday, January 24, 2011 1:23:04 PM



Page 1

Item ID: D407-667-105

Accept



Setup Start



Revision ID:

Stop



Item Name: Crosstube Fwd

Start Date: 1/24/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 2/7/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: 

Date: 11-01-24 Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
|----------|--------------|

| | |
|--------------|-------|
| D407-667-145 | Rev C |
|--------------|-------|

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels as per PPP D407-667-105 CHG003

Sulos/03

JGC CL 11-5-03

110

0.00



Packaging

Packaging

Memo

0.00

Packaging

DP

11-4-6

120

0.00



BENDING MACHINE - CROSSTUBES

CNC Bend 2

Memo

0.00

CNC Alpha 160 Bender

Bend tube as per Dwg D407-667-145 using CNC bender program 407-fw

DP

11-4-6

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

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Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC15- Crosstube Dimensional Check

0.00

8 u/04/06

0.00



QC

Memo

Quality Control

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp, Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

140



Crosstubes

Crosstubes

Crosstubes

Memo

1- scribe batch # inside of cuff

2-Drill pilot holes in tube using drill Jig DT8541 & DT8542 as per Dwg D407-667-145. Drill all (3) top holes use drill table jig DT8577 hole #1,#11 to set up towers, as per QSI0010.

3-Drill and Ream all holes in tube to finish size using drill Jig DT8541 & DT8542 as per Dwg D407-667-145 Check dimensions between holes on all four sides.

4-Flip tube and switch drilling Jigs from right to left, left to right. Locate Jigs off existing holes using "T" pins.

5-Drill pilot holes using drill Jig DT8541 & DT8542 as per Dwg 407-667-145. Drill only the top (2) holes.

6-Drill & ream the top (2) holes to finish size using drill Jig DT8541 & DT8542 as per Dwg D407-667-145

7-Drill Fwd rivet holes using drill Jig DT8787FWD as per Dwg D206-667-145. Note: Fwd side has 3x top holes.

8-Drill Aft rivet holes using drill Jig DT8787AFT as per Dwg D407-667-145.

9-C'sink holes as per Dwg D407-667-145. Allow rivet to sit below surface to compensate for paint.

10 -Deburr & Inspect for surface damage. Repair damage within limits as per

SAD
11-04-07SAD
11-04-07

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Stop



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Cust Item ID:

Required Date: 2/7/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 210 | SprayPaint | 0.00 | | | | | | | |
| | SprayPaint | | | | | | | | |
| Spray Painting | Memo | 0.00 | | | | | | | |
| | 1-Prime inside and outside crosstube as per QSI 005 4.2 | | | | | | | | |
| | 2-Paint outside crosstube with White Imron as per QSI 005 4.2 | | | | | | | | |
| | PRIME: | | | | | | | | |
| | Start Time: 10:00 | | | | | | | | |
| | Finish Time: 11:00 | | | | | | | | |
| | PAINT: | | | | | | | | |
| | Start Time: 3:30 | | | | | | | | |
| | Finish Time: 4:30 | | | | | | | | |
| 220 | QC14- Inspect Spray Paint | 0.00 | | | | | | | |
| | QC | | | | | | | | |
| Quality Control | Memo | 0.00 | | | | | | | |
| | Then, Wrap in plastic bag to protect from scratches | | | | | | | | |

M 11 04 20 (1)

ET 11 04 21

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



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|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

230

0.00



Crosstubes

Crosstubes

Memo

0.00

1-Install support using 0.03" to 0.06" thick layer of magnobond 6398 per QSI 015. Let cure for 12h after installation and prior to packaging. Note: (3) top holes should be facing up.
A/R Magnobond 6398 : 116677

2-Torque clamps to 80-100 in lb

3-Install nut plates as per Dwg D407-667-145. Touch-up rivet heads with Imron paint.

RT 11 04 25

240

0.00



QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

Quality Control

N 11 05 02 ①

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 250 | Pick Kit | 0.00 | | | | | | | |
| | | | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | |
| Packaging | | | | | | | | | |
| 260 | QC4- 100% Inspect kits for completeness | 0.00 | | | | | | | |
| | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 270 | Packaging | 0.00 | | | | | | | |
| | | | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | |
| Packaging | Identify and pack for shipping as per PPP D407-667-105 | | | | | | | | |
| | Location: _____ | | | | | | | | |
| | PPP Rev: <u> C </u> | | | | | | | | |

| W/O: | | WORK ORDER CHANGES | | | | | |
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Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

280

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/5/3

MF
11-05-03

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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NOTE: Date & initial all entries

Picklist Print

Page 1

Monday, January 24, 2011 1:23:13 PM

Work Order ID: 65720

Parent Item: D407-667-105

Parent Item Name: Crosstube Fwd

Start Date: 1/24/2011

Required Date: 2/7/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:F05.09.01 Add holes for compatibility with Bell Skidtubes KJ/JLM
 IPP Rev:G 08-05-16 chg QC6 to QC15 DD verified by:EC
 IPP Rev:H 08-06-03 update as per DSI9415 (ECN1198) DD verified by:ec
 IPP Rev:I 08-07-14 add (scribe inside of tube) seq.6 DD verified by:EC
 IPP Rev:J 08-07-28 update as per (par 08-013) DD verified by:EC
 IPP Rev K 09.01.06 ECN 08-562 EC verified by:DD

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

| | | | | | | | | | | | | | |
|-----------------|--|--------------|----|--|--|-----|------|--------|---|---|--|--|--|
| D407-667-105TRN | | Manufactured | No | | | 110 | Each | 0.0000 | 1 | 1 | | | |
|-----------------|--|--------------|----|--|--|-----|------|--------|---|---|--|--|--|

Crosstube Turning Detail

| | | | | | | | | | | | | | |
|-----------|--|--------------|----|--|--|-----|------|--------|---|---|--|--|--|
| D2873-043 | | Manufactured | No | | | 230 | Each | 8.0000 | 2 | 2 | | | |
|-----------|--|--------------|----|--|--|-----|------|--------|---|---|--|--|--|

Nut Plate Assembly

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
|----------|---------|----------|

| | | |
|-------|---|--|
| LG | 6 | |
| 63497 | 6 | |
| ST | 2 | |
| 60981 | 2 | |

| | | | | | | | | | | | | | |
|-----------|--|--------------|----|--|--|-----|------|--------|---|---|--|--|--|
| D2873-045 | | Manufactured | No | | | 230 | Each | 8.0000 | 2 | 2 | | | |
|-----------|--|--------------|----|--|--|-----|------|--------|---|---|--|--|--|

Nut Plate Assembly

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
|----------|---------|----------|

| | | |
|-------|---|--|
| LG | 8 | |
| 60982 | 4 | |
| 63498 | 4 | |

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Parent Item: D407-667-105

Parent Item Name: Crosstube Fwd

Start Date: 1/24/2011

Required Date: 2/7/2011

Start Qty: 1.00

Required Qty: 1.00

D2891-1 Manufactured No

230 Each

41.0000

2 2



2.25 Support



ST 11-04-25

Location

Loc Qty

Loc Code

LG

41

50952

11

53773

20

62595

10

x2

D3595-063-395 Manufactured No

230 Each

55.0000

4 4



RUBBER CUSHION



65361 x4

ST 11-04-25

Location

Loc Qty

Loc Code

FP

10

44667

10

ST

45

63368

45

MS20601-AD4W10 Purchased No

230 Each

78.0000

14 14



RIVET



117193 x14

ST 11-05-02

Location

Loc Qty

Loc Code

LG051

78

114245

2

115405

2

115881

16

116186

58

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Shop Packet Print

Page 2

| W/O: | | WORK ORDER CHANGES | | | | | |
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Work Order ID: 65720

Parent Item: D407-667-105

Parent Item Name: Crosstube Fwd

Start Date: 1/24/2011

Required Date: 2/7/2011

Start Qty: 1.00

Required Qty: 1.00

MS21920-20

Purchased

No

230

Each

37.0000

4

4



Clamp (per MIL-DTL-8783C)

116799



25 11-04-25

Location

Loc Qty

Loc Code

LG

37

112624

2

114687

1

115736

34

AN5-10A

Purchased

No

250

Each

153.0000

10

10



Bolt



11173135

Location

Loc Qty

Loc Code

ST337

153

115589

50

115700

103

AN5-30A

Purchased

No

250

Each

80.0000

4

4



BOLT



5

Location

Loc Qty

Loc Code

ST339

80

114941

30

116003

50

AN5-32A

Purchased

No

250

Each

198.0000

4

4



Bolt



115125

Location

Loc Qty

Loc Code

ST340

198

115016

50

115108

50

115589

60

115698

38

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector | |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Page 4

Monday, January 24, 2011 1:23:14 PM

Work Order ID: 65720

Parent Item: D407-667-105

Parent Item Name: Crosstube Fwd



Start Date: 1/24/2011

Required Date: 2/7/2011

Start Qty: 1.00

Required Qty: 1.00

AN960JD516 NAS1149D0563J Purchased

No

250

Each

34.0000

18

18



Washer



M117291 *[Signature]*

Location

Loc Qty

Loc Code

ST

34

103694

18

107534

12

109287

4

MS21042L5

Purchased

No

250

Each

1,247.000

4

4



Nut



1/15/12 *[Signature]*

Location

Loc Qty

Loc Code

ST139

26

114813

26

ST300

1221

115156

5

115594

500

116104

20

116105

496

116548

200

4

Monday, January 24, 2011 1:23:14 PM

Shop Packet Print

Page 4

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

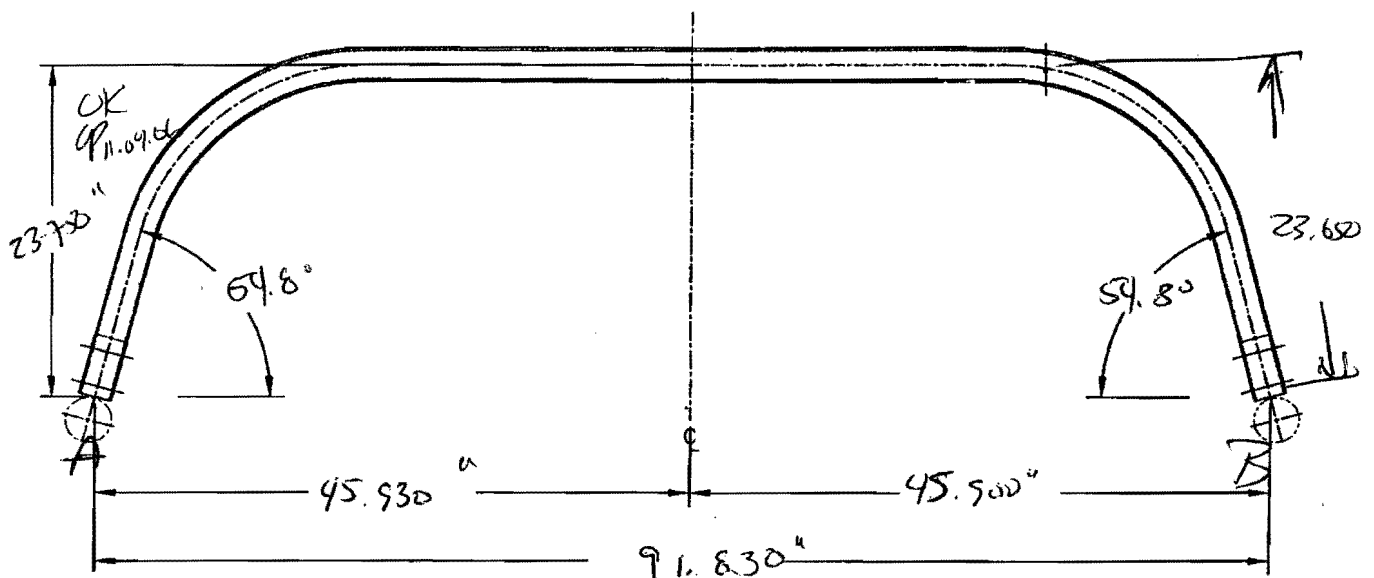
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

| | | | |
|---|--|---------------------|--------------|
| DART AEROSPACE LTD | | Work Order: | 65720 |
| Description: Crosstube High Fwd (407) | | Part Number: | D407-667-105 |
| Inspection Dwg: D407-667-145 Rev: C | | Page 1 of 1 | |

| Required Dimension | Min | Max |
|--------------------|-------|-------|
| Height | 23.41 | 23.67 |
| 1/2 Span | 45.81 | 46.07 |
| Angle | 54 | 56 |
| Total Span | 91.63 | 92.13 |



| Comments |
|--|
| One side bend high. Acceptable P11.04.06 |
| P11.04.12 |

| | |
|-----------------|----------|
| QC15 Inspection | S |
| Date | 11/01/06 |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|----------------------------------|------------|----------|
| A | 07.02.06 | New Issue | KJ/JM | |
| B | 09.11.12 | Dimensions updated per Dwg Rev C | KJ | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

| Item | Qty -145 | Part Number | Description |
|------|-------------|-------------------|--|
| 1 | X | D407-667-145 | CROSSTUBE ASSEMBLY (407 HIGH FWD) |
| 2 | 1 | D6010-115 | CROSSTUBE |
| 3 | 2 | D2873-043 | NUT PLATE |
| 4 | 2 | D2873-045 | NUT PLATE |
| 5 | 2 | D2891-1 | SUPPORT |
| 6 | 4 | D3595-063-395 | RUBBER CUSHION |
| 7 | 4 | MS21920-20 | CLAMP (OR MS21920-21) |
| 8 | 14 | MS20601AD4W 10 | RIVET (OR NAS9302B-4-10) |
| 9 | A/R | MAGNOBOND 6398 | ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299- 947-100, TYPE II, CLASS 2 ADHESIVE) |

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 65720
PL11-01-24

GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6010-115
FINISHED LENGTH = 113.20±0.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER "D407-667-145" AND BATCH NUMBER ON
INSIDE OF CUFF USING VIBRATING STYLUS.
- 7) WEIGHT: 17.8 lbs
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) RUN CUTTER OFF PART WHERE INDICATED. BLEND OUT EDGE LONGITUDINALLY,
TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 6 PASSES. MAXIMUM TUBE FLATTENING DUE
TO BENDING IS 6% BASED ON O.D.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 12) INSTALL D2891-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER
QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-20 CLAMPS (OR -21) WITH D3595-063-395 RUBBER CUSHIONS TO SECURE
THE D2891-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMP MECHANISMS
ARE LOCATED ON CROSSTUBE SUPPORTS.
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE
OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS
SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT
LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN
SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

RELEASED
08/11/06

| | | | |
|------------|---|--|--------------|
| C | REVISE GENERAL NOTES/PART LIST (ZN D7-1); REORGANIZED VIEWS AND REFORMATTED DRAWING TO CURRENT STANDARDS. D3595-063-395 WAS D2856-400-694 (ZN D6-2 & A5-2); REMOVED REF. 7 ADD TOLERANCES (ZN C6-3, C4-3, D2-3); RELOCATED FLAG #6 (ZN A8-3) PER NCR 210; MOVED TURNING DETAIL & UPDATED TOLERANCE TO SHEET 4. | RF | 08.11.06 |
| B | ADD HOLES AND NUT PLATES FOR COMPATABILITY WITH BHT/AA SKUDTUBES | PH | 05.07.26 |
| A | NEW ISSUE | CP | 02.05.08 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | RF | DART AEROSPACE LTD | |
| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | RF | DRAWING NO. | REV. C |
| MFG. APPR. | RF | D407-667-145 | SHEET 1 OF 4 |
| APPROVED | RF | TITLE | SCALE |
| DE APPR. | RF | CROSSTUBE ASSY (407 HIGH FWD) | NTS |
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| W/O: | | WORK ORDER CHANGES | | | | | |
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| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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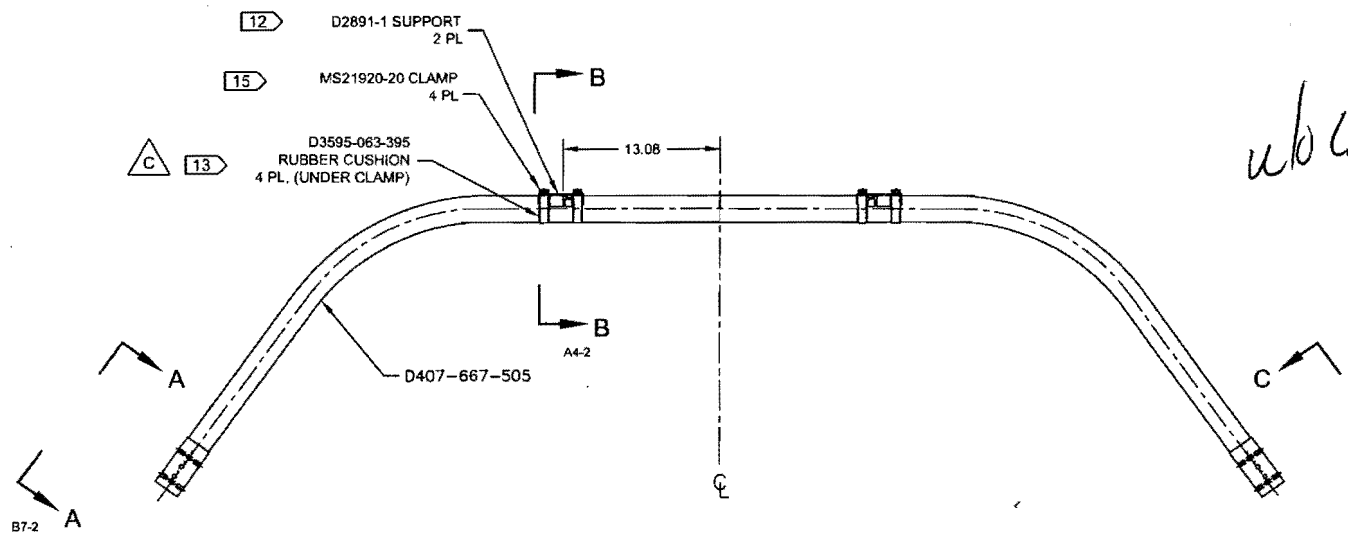
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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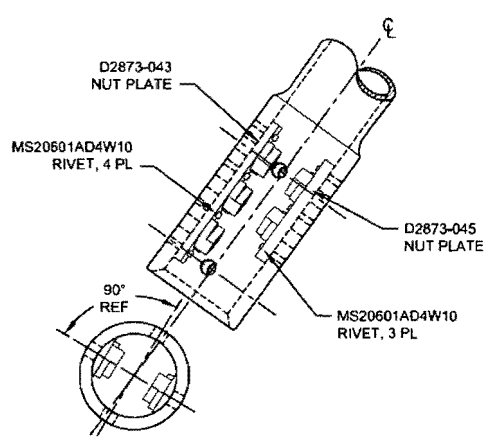
NOTE: Date & initial all entries

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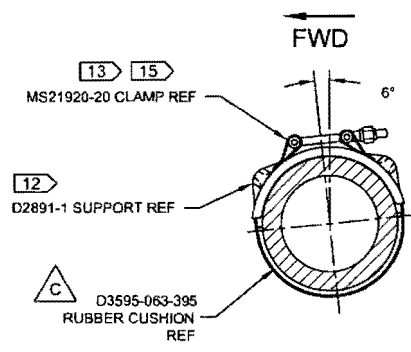


u665720

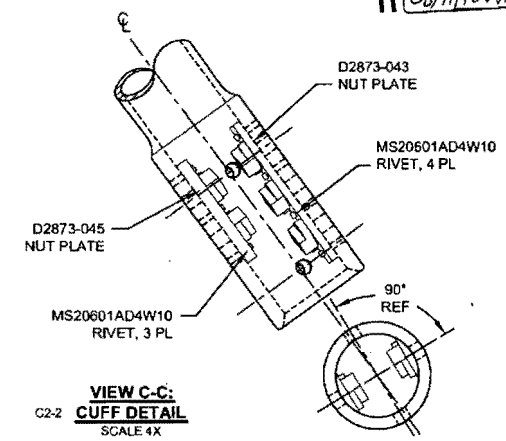
D407-667-145
ASSEMBLY DETAIL
(VIEW LOOKING FWD)



VIEW A-A:
CUFF DETAIL
SCALE 4X



SECTION B-B
SCALE 5X



VIEW C-C:
CUFF DETAIL
SCALE 4X

| | | | |
|------------|----------|---|--------------|
| DESIGN | 90 | DART AEROSPACE LTD | |
| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | CP | DRAWING NO. | REV. C |
| MFG. APPR. | EP | D407-667-145 | SHEET 2 OF 4 |
| APPROVED | HP | TITLE | SCALE |
| DE APPR. | | CROSSTUBE ASSY (407 HIGH FWD) | NTS |
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8 7 6 5 4 3 2 1

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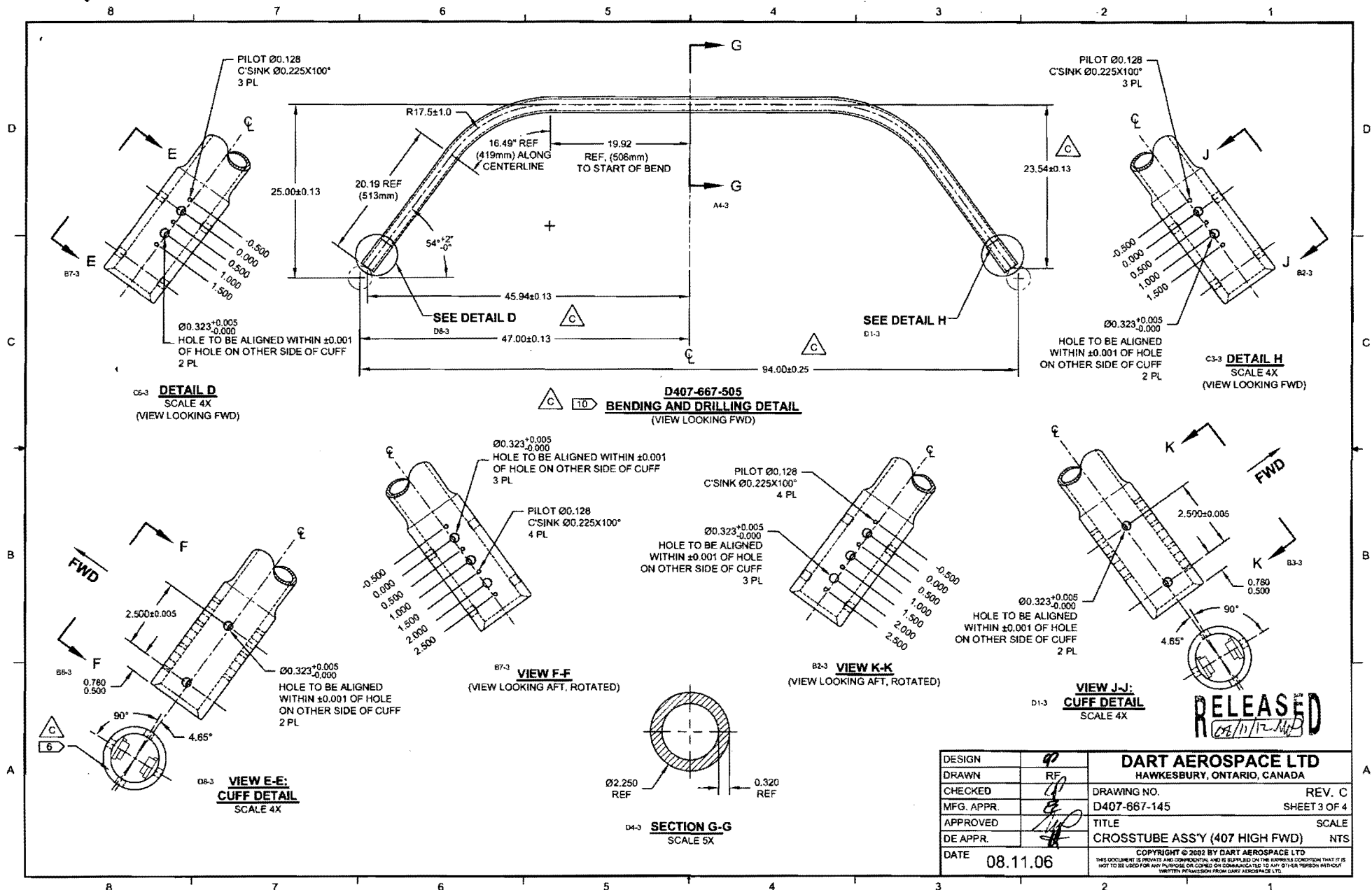
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NOTE: Date & initial all entries

Wb 65720



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| DESIGN | 97 | DART AEROSPACE LTD | |
| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | RF | DRAWING NO. | REV. C |
| MFG. APPR. | RF | D407-667-145 | SHEET 3 OF 4 |
| APPROVED | RF | TITLE | SCALE |
| DE APPR. | RF | CROSS-TUBE ASS'Y (407 HIGH FWD) | NTS |
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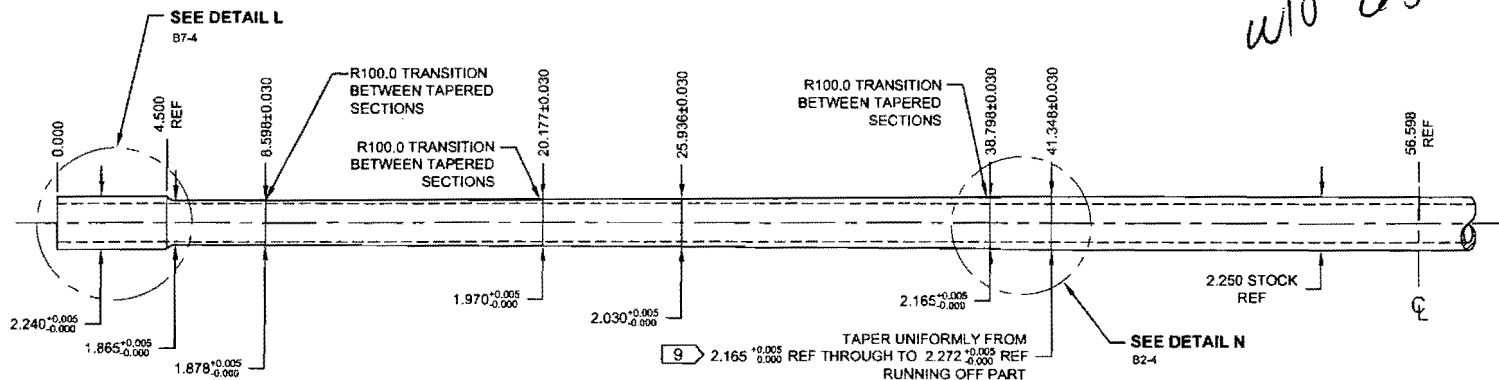
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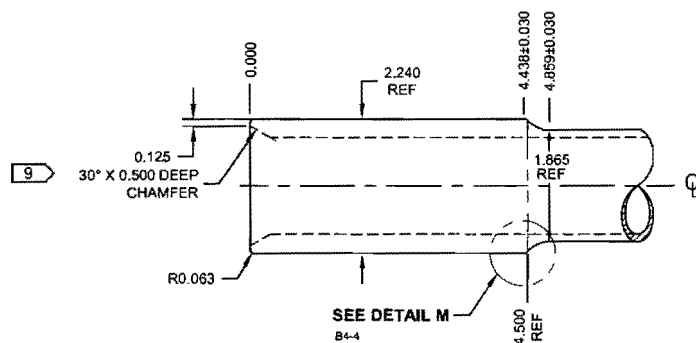
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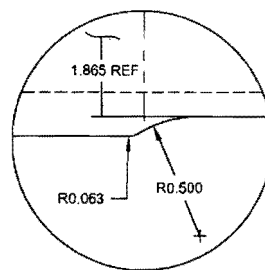
NOTE: Date & initial all entries



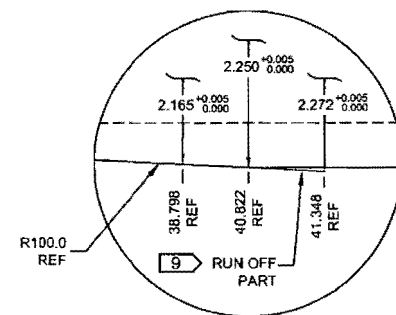
TURNING DETAIL



**DETAIL L:
CROSSTUBE CUFF**
NOT TO SCALE



**DETAIL M:
CUFF TRANSITION**
NOT TO SCALE



**DETAIL N:
TAPER RUN-OFF**
NOT TO SCALE

RELEASED

| | | | |
|------------|----------|---|--------------|
| DESIGN | 9 | DART AEROSPACE LTD | |
| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | RF | DRAWING NO. | REV. C |
| MFG. APPR. | RF | D407-667-145 | SHEET 4 OF 4 |
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| DE APPR. | RF | CROSSTUBE ASS'Y (407 HIGH FWD) | NTS |
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NOTE: Date & initial all entries



HeathAir

INTERNATIONAL (1991) INC.

681 Ave. Lepine, Dorval, Québec H9P 1G3
Tél.: 514 636-1000 • Fax: 514 636-0031

W.O. 44196

A.M.O. Number: 46/90

NON-DESTRUCTIVE TESTING REPORT

AIRCRAFT / COMPONENT INFORMATION

REGISTRATION:

MODEL/TYPE:

SERIAL NUMBER:

TOTAL HR/LDG:

OPERATED BY:

BASED AT:

INSPECTION REQUIREMENTS

Carry out FPI of (2) cross tubes (external surface) as per ASTM E-1417-05 and the Dart QSI 038, Section 4.1.1 (on file at client) - parts delivered to HeathAir.

Qty (2) P/N D407-667-105 S/N's B65720 and B65721.

Sales Order Ref.: 230627

Contact: Chantal Lavoie at 613-632-5200 for pick-up.

☐ RADIOGRAPHY

☐ ULTRASONIC

☒ PENETRANT

☐ MAGNETIC PARTICLE

☐ EDDY CURRENT

INSPECTION REPORT

Fluorescent penetrant inspection was performed in accordance with the above requirements on (2) cross tubes.

Note: A Level 3 penetrant was substituted for the requested Level 2 (3 is more sensitive)
Ardrox 970P25E Batch #04B503.

(2) cross tubes inspected. (2) PASSED / (0) FAILED.

M 11 04 20

THE MAINTENANCE DESCRIBED ABOVE HAS BEEN PERFORMED IN ACCORDANCE WITH
THE APPLICABLE STANDARDS OF AIRWORTHINESS

DATE April 14, 2011

INSPECTED BY: *[Signature]*

CUSTOMER: Dart Aerospace

ADDRESS:

CUSTOMER INFORMATION

P.O. NUMBER

PO13868

CONTACT NAME:

Chantal Lavoie

| | | |
|-----------------|---|-----|
| LABOUR | @ | \$ |
| MATERIALS | @ | |
| TRAVEL EXPENSES | @ | GST |
| HOTEL EXPENSES | @ | PST |

INVOICE NO.

TOTAL \$

WHITE COPY - INSPECTION FILE • YELLOW COPY - CUSTOMER • PINK COPY - ACCOUNTANT

